

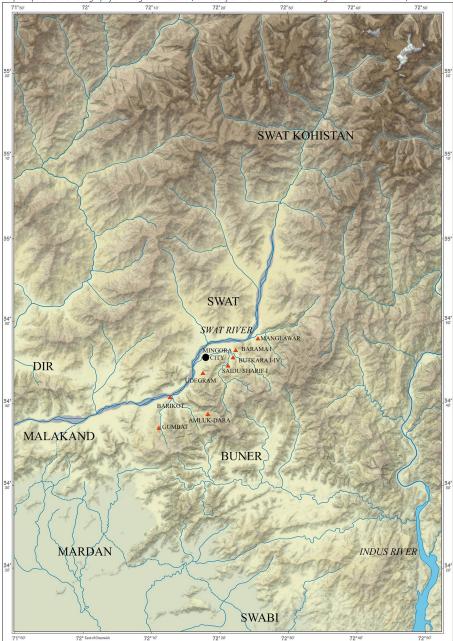
# Barikot's Apsidal Temple:

an early Buddhist urban shrine in Outer Gandhara

**Luca Maria Olivieri** – The presence of an apse was a common architectural feature in early Buddhism. An apsidal temple associated with an Indian-style Buddhist stupa was recently discovered at Barikot in Pakistan's Swat Valley, dating to the time of the great promoter of Buddhism, the Mauryan Emperor Aśoka (r. 268–232 BC). The monument was modified from an earlier, non-Buddhist shrine from the time when Alexander the Great besieged Barikot in 327 BC. It suggests the assimilation of pre-Buddhist places of worship in the Gandhara region during the spread of Buddhism from the Indian subcontinent to central Asia and beyond along the Silk Roads.

Figure 2: Map of the Swat Valley with the main archaeological sites

Map: Department of Geography and Regional Research, University of Vienna/Italian Archaeological Mission in Pakistan



# A long-lasting excavation project

Barikot, the great archaeological site on the bank of the Swat River (Fig. 1), the ancient Bazira of Alexander the Great, continues to be a mine of information for archaeology despite multiple archaeological campaigns since 1984. This article reports on the recent discovery of an ancient apsidal temple (Shrine H) which documented the introduction of Buddhist cults in an urban context in the region of Gandhara and its surroundings.

The city of Barikot is of paramount importance for the archaeology of the region as it is one of the few urban sites of the area that has been extensively excavated with a rigorous stratigraphic methodology for nearly 40 years by the

ISMEO Italian Archaeological Mission. Since 2011 this was in collaboration with the Khyber Pakhtunkhwa Directorate of Archaeology (DOAM KP), and since 2020 with the Ca' Foscari University of Venice. The site is located in northern Pakistan, on the left bank of the Swat River, in the outer territories of the province of Gandhara, known in the Buddhist literature as Oddīyāna. The ancient city lies on the plain at the foot of a steep hill (the ancient acropolis), and it is delimited by the Indo-Greek fortification. The acropolis, overlooking the Swat River flowing to the north, remained a fortified place until the fourteenth century, long after the abandonment of the lower city (Fig. 2). The settlement has a long history from about 1200 BC to the sixteenth century AD,

represented by an uninterrupted stratigraphy whose chronology is confirmed by radiocarbon dating.

### The names of the city

The site is reported as Bazira or Beira, a town defined as 'pólis' or 'urbs opulenta' by the historians of Alexander the Great (327 BC). That placename is the phonetic transcription of a toponym known in the Sanskrit/Prakrit diglossia as Vajra/ Vaïra, 'diamond', 'thunderbolt'. This was the ancient name of the settlement1 whose hill stands isolated like a diamond in the fertile water-rich valley of the Swat.<sup>2</sup> The settlement is mentioned as Vajirasthāna ('the fortified place of Vajra') in a Shahi-era inscription found at Barikot and now in the Lahore Museum<sup>3</sup> Finally, in a fifteenth-century Tibetan text (The Blue Annals), Barikot is not only recorded as the main Tantra teaching centre of Oddīyāna, but as an important town and associated with the name in of king Indrabhuti, the mentor of Sadhu Padmasambhava, known as Guru Rimpoche in the Himalayas. Indrabhuti's town was located '[...] in the northern quarter, in Śrī-Vajrasthāna, Oḍḍīyāna [Swat].4 The placename has continued to be used to this day, as the current (non-Pashto) toponym of Birkot/Barikot tells us.

The importance of the city as an agricultural colony (*urbs opulenta*) since archaic times is linked to its role in a region whose agricultural wealth exceeded the production of any other district in ancient north-western India (apart from Kashmir).<sup>5</sup> Swat's exceptional double-crop agriculture was made possible by the fortunate combination of fertile soils, water resources, insolation and climate. We know that Buddhist communities, after the second century AD, took over agricultural production, turning the monasteries into true rural *villae*.

The narrative backdrop of the entanglement of Buddhism, water and agriculture is made explicit in what has been considered the 'foundational myth' of Buddhism in Swat<sup>6</sup> (the conversion of the nāga Apalala ('sproutless') by the Buddha himself. Nāgas are semidivine serpent beings important in early Buddhist, Hindu and Jain belief. This legend was intertwined in a double knot with those relating to the matrilineal nāga ancestry of the Odirāja princes, which were first spread along the Silk Road by Xuanzang (602-664) the, Chinese Buddhist monk renowned for his translations of Buddhist texts into Chinese and for the account of his pilgrimage to India in 629-645, which took him through Swat and Gandhara.

Figure 3: Aerial view from the N of the archaeological site of Barikot



### Working against the odds

Since 1984 and over 34 excavation campaigns, 23 trenches have been opened, covering almost all the sectors of the ancient settlement (Fig. 3). Excavations carried out in 2021-23 in the central part of the ancient city, revealed the presence of a Buddhist shrine - the focus of this article. The area was largely disturbed by large and deep robbers' pits and trenches. It had been to prevent such spoliation that the Italian Mission had already leased several pieces of archaeological land in this area for three decades. Unfortunately, the central part was owned by people who were in league with the robbers (but also with international antiquity dealers and foreign scholars) and had not agreed to lease their land to us. In 2011 the Italian Mission started a campaign of excavation and protection, coinciding with a constitutional amendment which led to archaeology and heritage being devolved from central control to the provinces. The same year the Mission started the ACT-Field School project - a large and well-known 'community archaeology' project for the protection of the Swat heritage with Barikot as its focus.

In 2019 as one of the major outcomes of the ACT project, the provincial authorities, DOAM KP, finally acquired

a great part of the archaeological site of Barikot (including the central area). In 2021 we could start working here. We selected an area, partly occupied by some illegal buildings, where I had seen and photographed in 2006 a curious round hollow building partly exposed in a robbers' pit. Once the robbers' pits had been emptied and the intact archaeological levels reached, a very interesting Buddhist monument, a true apsidal temple (henceforth: Shrine H), came to light. Despite the vandalism, the monument is preserved to a height of over five metres from the bottom (considering that the upper part of the late building was destroyed with a bulldozer during leveling works). That was exactly the 'round hollow building' I had noted in 2006.

# Centre and periphery of the urban space

An extremely interesting element concerns the location of Shrine H. At the time it was built and at least until the first century AD, Shrine H stood at the northern edge of the city, near a large open space, which, although within the city's defensive walls, was located between the lower city and the acropolis. Only in the Kushan period (c. 90–240) would the lower city of Bazira/Beira

expand on this open space to become one with the acropolis. Significantly, Shrine H thus came to be located exactly in the centre of the new extended city. Various other Buddhist monuments would be built around it, forming the religious monumental centre of the Kushan city. This process of sacralisation continued until the Huna period (400–500 AD) even after the city was abandoned. In this post-urban historical period, a later stupa was founded near Shrine H, testifying to the persistence of the sacred charm of that space.

#### The early Shrine H

What appeared to our eyes at the beginning of the dig, was a large cylindrical cella (d. 6 m), which housed a minor stupa inside, and which was built upon on an apsidal podium (a unique feature in Gandharan architecture) accessible with a staircase from the west. That is how the monument looked in the third-fourth century AD (Fig. 5). The original layout of the monument was very different.

In its early phase (dated by radiocarbon to the mid/end-third century BC), the monument featured an open circular cella encircled by a horseshoe-shaped corridor, fenced on both sides by a low brick wall on raised

Figure 4: Nadiral view of trenches BKG 16 (left) and BKG 21 (right): Shrine H in the centre of BKG 16; The dotted squares indicate the earlier Indian-type stupa, and the later small Gandharan stupa. N is above photo Italian Archaeological Mission in Pakistan. 2023



Figure 5: View from the WNW of Shrine H (late phases: from the 2nd-4th century AD). N is slightly to the left. Part of the Indian-type outer stupa from the mid-3rd century BC is visible in the lower left corner, below the podium of a small Gandharan stupa photo Italian Archaeological Mission in Pakistan, 2023



stone foundations (Fig. 4). The circular cella has the characteristics of a sacred well. On the outside, Shrine H was flanked in this early phase by a smaller Indian-type stupa (built directly on the ground without a podium. The shrine and its courtyard were surrounded by a rectangular precinct, opened to the west. One should consider the unexpected similarity of the monument to the deeper phases of the famous apsidal temple of Sirkap at Taxila, a capital of Gandhara. The cella of the apsidal building (the double of our Shrine H) was excavated in the nineteenth century by Alexander Cunningham (1814-93) to a depth of five meters, when he documented a stone floor and stuccoed walls.7 At a higher level the monument was connected to a porticoed vestibule, the pronaos, where Cunningham found fragments of 'burnt clay statues of colossal size'.

#### The intermediate Shrine H

Between the second and first century BC, the Barikot shrine was heavily modified. Inside the corridor and the cella the low brick walls were dismantled and replaced by a stone masonry elevation. In a later moment of this phase, which lasted until the end of the first century AD, the apsidal corridor around the cella was vaulted. At a later stage, we have evidence of a frontal staircase on the west side. One step bore two steprisers with a dedicatory inscription written in Kharoṣṭhī, the script used for Gandharan. The inscription indicates

Figure 6: BKG 16, two of the step-risers of Shrine H with Buddhist dedicatory inscription (1st century AD) photo Italian Archaeological Mission in Pakistan, 2022)

a single donor whose personal name has been lost but is identified by the patronymic (Saṃgharakṣita) and bears the typical formula: 'All Buddhas are honoured, mother and father are honoured [...]'.8 To make room for the new staircase, the Indianstyle stupa was demolished. In its place, a smaller Gandharanstyle stupa was built on a square podium (Fig. 4). The cella at this stage may have been covered by a domed roof, and thus had the appearance of a womb-shrine, of the type both recalled in the epigraphical record, and in some rare sculptural representations.

## The last shape of the shrine

A radical change occurred at the beginning of the second century AD, which was the time when the local rulers Odirāja lost their power to the Kushan. These largely supported the increasingly powerful monastic communities against the landed aristocracy. At that time in history, the shrine underwent some massive changes that totally altered its form. The apsidal corridor was filled with soil and layers of stones up to the ceiling and transformed into a massive podium accessible by the stairway. In this phase, an isolated circular domed cella arose from the apsidal podium, an architectural type which (apart from the apsidal podium) became popular during the late-first to third centuries AD in Swat and Gandhara. The interior of the cell also changed radically. The interior space was completely filled, an earth floor was prepared and a small stupa was built in the centre. The form that was given to the shrine was thus that of a typical stupa-shrine of the mature phase of Gandharan architecture, of the type already known towards the end of the first century AD (Fig. 6). The only variant, here constrained, so to speak, by the pre-existing structures, is the apsidal podium. This feature makes the late phase of Shrine H architecturally unique in the whole of Gandhara.

This remained the shape of the building until the fourth-fifth century AD. Despite the fact that the surrounding buildings were abandoned in the aftermath of a major earthquake (at the beginning of the

fourth century AD), the shrine remained visible and still functional. In its last phases the horse-shoe shape of the podium was enclosed by a low bench, while inside the small stupa almost disappeared under the growing floors, the last of which paved by large stones. In this last phase the first-century AD cylindrical cella was dismantled and made smaller.

## Material culture and finds

Over 20 pottery bowls bearing the names of the owners (Buddhist monks), scratched in Kharoṣṭhī script, are associated with the last phases. Interestingly, the inscribed bowls were found in association with incense burners and cottonseeds (dated until the end of the third century CE). Several other artefacts were also discovered, including a quite consistent corpus of fragments of figures and architectural elements in stucco and schist (leftover from the robbers), female terracotta figurines, pendants and beads, coins, pottery, and metal objects. Among the

coins, particularly relevant for the earliest phases are a round copper late/post-Mauryan coin, a square Taxila/Indian coin, and two silver coins of the Indo-Greek king Menander I (r. 165/155–130 BC) (Fig 7). The materials associated with the Indo-Greek phase of the monument include many fragments of a typical Hellenistic ceramic form (the so-called 'fish-plates', kraterlike vessels), while from the earliest phase, we have fewer materials since the area of investigation was limited. For these earliest phases the most interesting finds are probably the female terracotta figurines of the Channavīra type with characteristic ornaments (Fig. 8) found inside Shrine H, in the corridor, and inside the cella. From a layer without proper context (a robbers' pit filling), came another extremely interesting find, certainly used in the ancient ritual, a conchshell (Lambis millipeda), which was brought to Swat, at the Hindukush piedmont, from the Indian Ocean, a thousand miles away (Fig. 9).

## **Unexpected evidence 1:** an archaic structure?

One unexpected element is related to the discovery inside the cell, at the depth of more than 6 metres below the datum point, of an archaic building that predates the apsidal phase. The archaic building is dated on the basis of radiocarbon data to at least the full fourth century BC (Fig 16). In this period it appears that the building had a semicircular plan open to the north (where the exit of a water gutter or spillway is preserved), and was enclosed by a series of side rooms with floors on a higher level. This archaic building is pretty enigmatic and it is still difficult to reconstruct. What seems apparent is that the structure was built against that slope, as if a natural site had been fenced off or monumentalized. Among the various hypotheses, there is the possibility that this archaic construction enclosed a space where water from the clay slope was collected and could be drained during the monsoon seasons. We have examples in Buddhist art of somewhat similar buildings, built against a natural slope and equipped with water

Figure 7: BKG 16, Shrine H: obverse of one of the silver coins of Menander I (c. 150 BC); diam. c. 17 mm.



mouths, interpreted as *nāga* shrines. The assimilation and transformation of the archaic monument around the third century BC to the Buddhist cult (significantly retaining the centre of the older shrine) is extremely interesting and calls to mind the phenomenon of the transformation of *nāga* or *yakṣa* (attendants of a deity who protect the righteous) shrines into Buddhist ones. The Barikot monument may represent very rare archaeological proof of this phenomenon.

# Unexpected evidence 2: archaeology of smell?

Another aspect of great interest is related to the various fireplaces documented around the building. Furthermore, there is also a high frequency of incense burners near these fireplaces. These artefacts are associated with another find, surprising to us. Flotation of the soil at the site revealed thousands of charred cotton seeds associated with flakes of pomegranate peel, found in their hundreds in many key layers, both inside and outside the cella in all phases. We know that cotton seeds (previously rarely reported from Swat) cannot be used as a feed due to their toxic properties especially for small non-ruminant mammals, so it is unlikely that these quantities had come from the dung cakes used as fuel. We are currently working on the hypothesis that the use of cottonseed associated with Shrine H is related to incense burners. This is because of the combustible qualities of the oil contained in these seeds, and also because of the long-lasting fragrances they produce (we have tested this), especially when burnt together with pomegranate peels.

Figure 8: BKG 16 and BKG 18 terracotta figurines: a = Channavīra type (3rd century BC), b-f = Baroque Lady-type (3rd-2nd century BC), g-h = Hellenistic Lady-type photo Italian Archaeological Mission in Pakistan, 2022

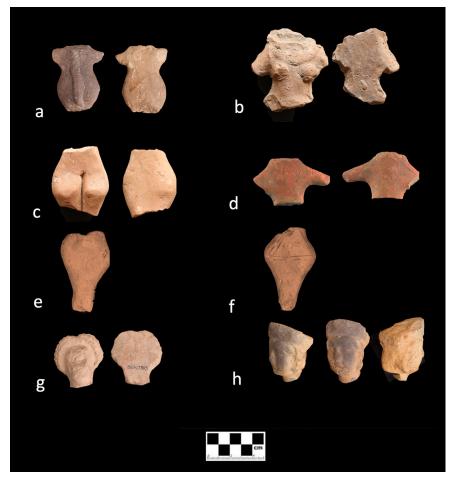


Figure 9: BKG 16, conch-shell (*Lambis millipeda*) photo Italian Archaeological Mission in Pakistan, 2022



#### **Conclusions**

In summary, this is a potential archaic cultic monument built around the fourth century BC, which may have been associated with a possibly ritualised control of water. The monument, certainly the most important and oldest in the city, was though founded in an eccentric position, dominating the urban area from behind. The location of this monument, should its religious function be confirmed, must therefore have depended on factors related to an intrinsic sacredness of the place, the

importance of which escapes us for now. In the mid-third century BC the building was re-sacralized, provided with an apsidal plan, and apparently dedicated to Buddhist cult. If so, at that historical stage, the presence of a Buddhist shrine within the city could testify to the process of integration of new ascetic-religious communities into urban contexts.<sup>10</sup>

The monument underwent a radical transformation in the Kushan era, when it was transformed into a more traditional Gandharan shrine, retaining the cell form but adding a stupa in the

Figure 10: BKG 16, Shrine H: Archaic construction phases (view from the N) photo Italian Archaeological Mission in Pakistan, 2023



centre of it. The religious charm of the shrine remained unbroken until after the abandonment of the city, as evidenced by a late stupa built nearby in the fifth-sixth centuries.

A final important element is related to the rituality of scented fumes, which must have been widely practised in Shrine H, as if this were somehow associated to the concept of a 'perfume hut' (gandhakuṭī). In the context of Swat's exceptional agricultural importance, we can imagine a relationship between the fragrant fumes, *nāga*, and the control of agriculture as voiced in some Buddhist agrarian rituals.11 Silk Road travellers, among them Xuanzang, would pay particular attention to all these aspects of ancient Swat/Oddīyāna, including the connections between nāga and agriculture.

#### **Further readings**

Coningham, R.A.E., R. Young (2015) The Archaeology of South Asia. From the Indus to Asoka, c. 6500 BCE-200 CE. Cambridge World Archaeology. New York: Cambridge University Press. Olivieri, L.M. (2019) The Early-Historic Funerary Monuments of Butkara IV. New Evidence on a Forgotten Excavation in Outer Gandhara. Rivista degli Studi Orientali, XCII/1-2, pp. 231-258.

Olivieri, L.M. (2022) Stoneyards and

Artists. The Buddhist Stupa of Saidu

Sharif I, Swat (c. 50 CE). Marco Polo Series, 1. Venezia: Edizioni Ca' Foscari. https://edizionicafoscari.unive.it/en/ edizioni4/libri/978-88-6969-577-3/].

Olivieri, L.M., F. Marzaioli, I. Passariello, E. Iori, R. Micheli, F. Terrasi, M. Vidale, A. D'Onofrio (2019) A New Revised Chronology and Cultural Sequence of the Swat Valley, Khyber Pakhtunkhwa (Pakistan) in the Light of Current Excavations at Barikot (Bir-kotghwandai). Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms, 456, pp. 148-156. https://doi. org/10.1016/j. nimb.2019.05.065.

Spengler, R.N., L. Tang, A. Nayak, N. Boivin, L.M. Olivieri (2021) The Southern Central Asian Mountains as an Ancient Agricultural Mixing Zone: New Archaeobotanical Data from Barikot in the Swat Valley of Pakistan. Vegetation *History and Archaeobotany*, 30(4), pp. 463-476. https://doi.org/10.1007/s00334-020-00798-8.

Strong, J. S. (1977) "Gandhakuţī": The Perfumed Chamber of the Buddha. History of Religions, 16 (4), pp. 390-406.

#### References

Baums, S. (2019) A Survey of Place-Names in Gāndhārī Inscriptions and a New Oil Lamp from Malakand. In Rienjang, W.; Stewart, P. (eds) (2020). The Global Connections of Gandhāran Art. Proceedings of the Third International Workshop of the Gandhāra Connections Project (University of Oxford, 18th-19th March, 2019). Oxford: Archaeopress., pp. 167-74.

- lori, E. (2023). Releasing Urban Religion beyond the City Wall: The Spatial Capital of Early Buddhist Monasticism in NW South Asia. Numen, 70 (2-3), 184-219. https://doi. org/10.1163/15685276-20231691
- Hinüber von, S. (2020) The Name of the City. In Olivieri, L.M. Ceramics from the Excavations in the Historic Settlement at **Bīr-koţ-gwaṇḍai** (Barikot) Swat, Pakistan (1984-1992). The Study. ACT-Field School Project Reports and Memoirs, Special Volume 2.1. Lahore: Sang-e-Meel Publications: 53-55.
- Roerich, G.N. (1949-1953) The Blue Annals. Calcutta: The Asiatic Society of Bengal.
- Olivieri, L.M., E. Iori (2021) Patterns of Early Urbanisation in Swat: A Reassessment of the Data from the Recent Excavations at Barikot. Ancient Pakistan, XXXII, pp. 33-55. Salomon, R. (2018) The Buddhist Literature of
- Ancient Gandhāra. Somerville: Wisdom Publications.
- Cunningham, A. (1871) Archaeological Survey of India. Four Reports Made During the Years 1862-1863-1864-1865. II. Simla: Government Central Press.
- Olivieri, L.M., E. Iori, E. Lant, M. Minardi, A. Samad, M. Vidale et al. (2022) Barikot, Swat: Excavation Campaign 2021-2022, Preliminary Report. Trenches BKG 16, BKG 17, and BKG 18. East and West, 3 (62), 2, pp. 67-194. Cf sectionby Baums.
- DeCaroli, R. (2004) Haunting the Buddha. Indian popular Religion and the Formation of Buddhism. New York: Oxford University Press.
- <sup>10</sup> Olivelle, P. (2024) Ashoka: Portrait of a Philosopher King. New Haven: Yale University Press.
- 11 Hidas, G. (2019) A Buddhist Ritual Manualcon Agriculture. Vajratuņdasamayakalparāja Critical Edition and Translation. Berlin-Boston: DeGruvter.

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